

Hitchcock's Machine Tool Blue Book

JUNE, 1933

TWENTY-EIGHTH YEAR

COLLETS AND FEED FINGERS

HARDINGE

DRAW-IN COLLETS
FOR ALL
LATHES AND MILLERS



HARDINGE BROTHERS, INC. ELMIRA, NEW YORK

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COLLETS

FEED FINGERS



MORRISON MACHINE PRODUCTS, INC.
ELMIRA, NEW YORK

Lower Prices—Better Products

Collets, Feed Fingers, Master Collets, Master Feed Fingers and Pads for: Brown & Sharpe, Cleveland, Cone, Gridley, National Acme, New Britain, Davenport, etc., Automatics.

Collets for: Bardons & Oliver, Cincinnati, Foster, Garvin, Pratt & Whitney, Warner & Swasey, etc., Hand Screw Machines.

An association of two reliable organizations, combining sixty years of Collet and Feed Finger manufacturing experience. These catalogs are a complete reference for all of your Collet and Feed Finger requirements.

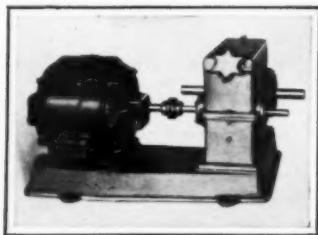
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Hardinge Brothers, Inc., Elmira, New York
Morrison Machine Products, Inc., Elmira, New York

PUBLISHED AT 508 So. DEARBORN ST. CHICAGO

LENNEY

A NEW UNIT OF MERIT



THE LENNEY VARIABLE SPEED TRANSMISSION

This unit gives you a long needed direct connected variable with a very high reduction.

The desired speed, even to the slightest fraction of a revolution, can be obtained between predetermined high and low limits.

WRITE FOR DETAILS.

H. P.	Weight	R.P.M. Input	R.P.M. Output
1	100	1200	10 to 100
1	100	1800	14 to 140

THE LENNEY MACHINE & MFG. CO.
WARREN, OHIO
Distributor and Dealer
Connections Desired.

LENNEY

Hitchcock's Machine Tool Blue Book

**Selected
Circulation**

**10,000
Monthly**

JUNE, 1933

TWENTY-EIGHTH YEAR

Are You Coming to the Century of Progress Exposition

If so, you are cordially invited to drop in to see us. Number 508 South Dearborn is central and easy to find—only a block South of the Loop.

If you are a manufacturer of machine tools or allied equipment, we would like to exchange the latest news as to how fast prosperity is rounding the corner.

Or if you wish to look up additional shop equipment while here, possibly we can be of some assistance. Our time and phone are at your service. Our Chicago advertisers, by the way, are listed on page 5.

But anyhow, come in and say "Hello." Our latch-string is always out.

Published By

Hitchcock Publishing Co.

508 S. Dearborn St.,

Chicago, Ill.

• Consult the Classified Finding Index for your requirements

KRW Hydraulic and Sensitive ARBOR PRESSES

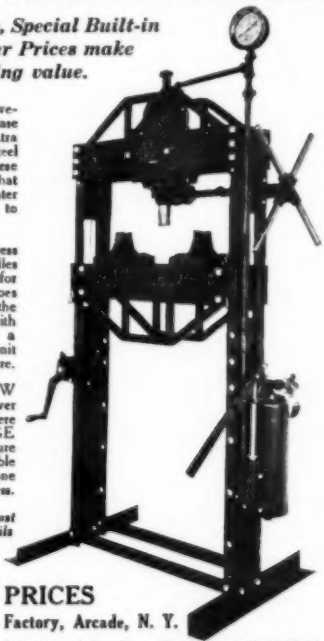
New Improvements, Special Built-in Features and Lower Prices make them an outstanding value.

THE last word in convenience, efficiency and ease of operation. Built extra strong and well braced with steel trusses electrically welded, these presses will withstand strains that would cause presses of lighter and inferior construction to buckle or collapse.

Hand wheel for sensitive press operations has sliding handles which pull out to the ends for increased leverage. Work does not have to be changed from the work table as is the case with other make presses having a separate sensitive press unit mounted on the side or elsewhere.

The importance of this KRW feature as a time and labor saver can be appreciated. Also there is **NO EXTRA CHARGE** for this important built-in feature on a KRW Press. Work table can be raised easily with one hand. A strictly one-man Press.

Write for special circular, just off the press, giving full details and specifications of all KRW Arbor Presses.



PRICES

F. O. B. Factory, Arcade, N. Y.

- | | |
|---|----------|
| No. 37—35 ton Hydraulic and Sensitive Arbor Press (hand operated) | \$128.00 |
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| No. 37E—50 ton Hydraulic and Sensitive Arbor Press (hand operated) | 150.00 |
| (Can also be furnished in air-oil operated at same price) | |
| No. 37F—70 ton Hydraulic and Sensitive Arbor Press (hand oper. only) | 275.00 |
| Gauge and fittings, \$15.00 extra on all presses. | |

K. R. WILSON

10-16 Lock Street, Buffalo, N. Y., U. S. A.
EXPORT DEPARTMENT
126 Liberty St., New York

WEST COAST BRANCH
722 Mateo St., Los Angeles

WHEN YOU COME TO THE CENTURY OF PROGRESS EXPOSITION

Get acquainted with the following *Chicago Manufacturers and Dealers*, who are advertisers in this publication. They will be glad to welcome you. They are in position to supply your present and future requirements in Machine Tools and allied shop equipment to your mutual advantage.

MANUFACTURERS

Armstrong Bros. Tool Co.,	308 N. Francisco Ave.
Armstrong-Blum Mfg. Co.,	341 N. Francisco Ave.
E. A. Baumbach Mfg. Co.,	1810 S. Kilbourn Ave.
Chicago Wheel & Mfg. Co.,	116 S. Aberdeen St.
Cullman Wheel Co.,	1359 Altgeld St.
Illinois Testing Laboratories,	150 W. Austin Ave.
N. A. Strand & Co.,	5001 N. Lincoln St.
Wittek Mfg. Co.,	4309 W. 24th Place.

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The
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No. 1
Special

Use The Automatic Magazine-Fed Machine

That drives short
screws and those
with short bodies
and large heads

Just keep the hopper filled—
no handling of screws beyond
that—a boy or girl can operate it.

For a good many years Reynolds Automatic MAGAZINE-FED Screw Driving Machines have been driving screws of all kinds for concerns all over the country, at savings of at least 100%.

The No. 1 Special, shown above, handles screws with short bodies and large heads, magazing and driving screws from No. 4 to No. 10 up to $\frac{1}{2}$ " long, to center of a 14" circle. It will pay you in actual dollars and cents to investigate the savings the Reynolds can effect in your shop.

Many other sizes and types for almost any size screw.

Drop us a line, giving dimensions over all of your work, length and gauge of screws used. We'll submit facts and figures showing how to reduce your costs.

The Reynolds Machine Company
Dept. H. H. Massillon, Ohio

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SCREWS**
REDUCE ASSEMBLY COSTS

ELCO SCREWS WILL IMPROVE YOUR PRODUCT

It will pay you to specify ELCO SCREWS if you desire accuracy and uniform high quality at moderate prices.

Modern production methods, ample warehouses and ideal shipping facilities enable us to offer our customers an unusual combination of Quality and Service. Standard sizes are shipped from stock in any desired quantity.

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WOOD SCREWS
LAG SCREWS
CAP SCREWS
PIPE PLUGS

Remember that in Screws—
there is a difference!

All inquiries
receive prompt,
intelligent
attention

**ELCO TOOL & SCREW
CORPORATION**

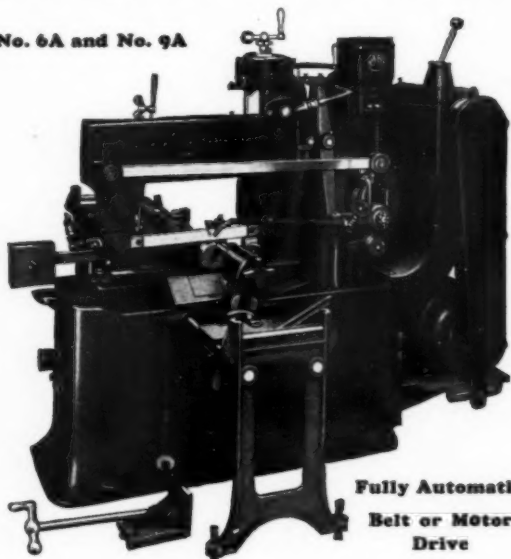
1808 Broadway, ROCKFORD, ILLINOIS

"It Pays to Use Good Screws"



The New MARVEL Ball Bearing High Speed Hack Saw Machines

No. 6A and No. 9A



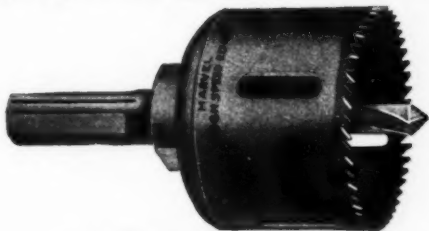
**Fully Automatic
Belt or Motor
Drive**

Two remarkable production saws of a new type, that automatically feed, measure to length, and cut bars into duplicate pieces. The fastest hack saws built, will cut at least 4 square inches per minute. Full ball bearing construction assures fast, easy, troubleproof running and power economy. Other features include: force lubrication; both power and hand feed; single speed or four speed transmission; belt or motor drive; exceptionally heavy and sturdy construction; draw cut. Lift action on idle or return stroke that saves blades. Capacities: No. 6A, 6 $\frac{3}{8}$ -inch round or 6 $\frac{1}{8}$ -inch square. No. 9A, 10-inch round or square. *The same size and type machines can be furnished without the automatic feature when desired.*

ARMSTRONG - BLUM

341 N. Francisco Ave.,

High Speed Edge Hole Saws and High Speed Edge Hack Saw Blades



MARVEL HOLE SAW

26 Sizes, $\frac{3}{4}$ " to $4\frac{1}{8}$ "

Cuts clean, round holes through steel, wood, cast iron, brass, copper, bakelite, slate, marble, etc., to a depth of $1\frac{1}{2}$ in. The teeth are HIGH SPEED STEEL, welded to a tough, special alloy UNBREAKABLE BODY. They stand up in use in portable electric drills and drill presses. **YOU WANT THE BEST.** Write us for details, price, etc.



MARVEL HACK SAW BLADES

MARVEL High Speed Edge Hack Saw Blades are guaranteed not to break in two in any machine—not even by accident. Marvel blades with the genuine high speed steel cutting edge electrically welded to a tough special alloy back outlast ordinary blades from six to ten times and with faster, cleaner cuts, and fewer blade changes.

Send for Descriptive Circulars

MANUFACTURING CO.
CHICAGO, ILLINOIS

A New Internal

**Developed by BLESER MOTORS, Ltd.
16th and Madison Sts., Springfield, Ill.**

Are You Interested —

1. *In promoting an engine* which will outperform any internal combustion engine now known to industry, and which can be manufactured and sold cheaper than the conventional type of engine?
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4. *In obtaining manufacturing rights and patent license* for commercial production of these engines?
5. *In handling financial or sales end* of such production?
6. *In the development of oil engines and further improvements* in internal combustion engines?
7. *In the production of development of air motors or air compressors, pumps, etc.,* of extremely small size and weight, and with extremely large capacity?
8. *In putting us in touch with parties who would be interested* in any of the above projects?

IF SO, YOU ARE INVITED to write us and arrange for a running demonstration of the new Bleser Motor illustrated herewith.

Bleser Motors, Ltd

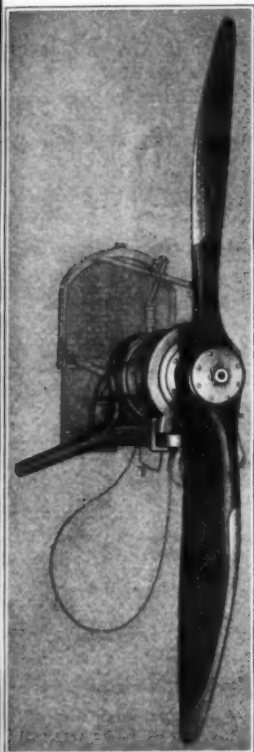
16th and Madison Sts.,

Springfield, Illinois

Combustion Engine

The picture herewith is from an actual photograph
of the working model of the

No. 539 Bleser Motor



SPECIFICATIONS:

TYPE, 12 cyl. water cooled, 4 cycle.

HORSEPOWER, 200 at 1200 r.p.m.
(Pony brake test)

DIAMETER, 19 inches.

FRONTAL AREA, 2 sq. ft. (approx.)

WEIGHT, 386 lbs.

LENGTH, 41½ in.

DISPLACEMENT, 539 cu. in.

24 explosions in 2 revolutions.

Patented and Patents Pending

This is a cam engine utilizing six double ended pistons, with roller bearing piston rollers working in opposed cylinders, which are arranged in a circle around the main shaft, and are parallel to the main shaft. The cam is so constructed that each piston goes through four cycles (two complete crank motions) during each revolution, and each cylinder therefore fires once per revolution of the main shaft.

NOTE

This photo is of the engine mounted in the test stand just as it is run. The radiator mounted in the top of the stand is of course temporary, and is used to cool the water while it is being run inside the building. The instrument panel containing the throttle, tachometer, temperature gauges, etc., is mounted at the rear of the stand.

*Additional information will be
furnished on request*

Bleser Motors, Ltd.

16th and Madison Sts.,
Springfield, Illinois

For Light and Heavy Etching

With 24 Stages of Control.

The LUMA Master Etchtool fulfills every marking requirement that can be done by an electric Etching outfit.

A Production Tool with as many as 24 different stages or varieties of control for regulating the depth of marking, this tool can be used for extra light marking of machinest scales, micrometers and fine tools or can be used for extra heavy and deep marking of rough and unfinished iron, cast iron, forgings, steel plates, etc.

Send for circular giving complete data and details of this modern instrument.



Built rugged for continuous work on the production line.

LUMA ELECTRIC EQUIPMENT CO.

DEPT. H.—Main P. O. Box No. 131—TOLEDO, OHIO

Grant NOISELESS SPINNING Riveter



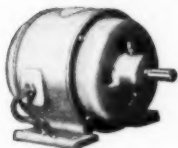
One rivet per second.
Heads highly polished.
No hammer or tool marks.
The work is always uniform.
As tight or loose as desired.
Works in hard-to-get-at places.
It's easily operated by cheap help.
A boy or girl can manipulate it.
And—it's noiseless in operation.

Write today for Catalog, showing several styles. Also send us samples of your work for riveting; we will return them with close estimate of cost.

The Grant Mfg. & Machine Co.
C. E. Station, Bridgeport, Conn.

NEW 1933 Emerald Motors

Simple—Sturdy—Dependable



**A Low Priced Motor
that "delivers the goods."**

Here is a New Up-to-date Motor that is designed to meet the requirements of modern industry. The Motors are built of the finest material to stand the severest test.

**SINGLE PHASE TYPE MOTORS:— $\frac{1}{2}$, $\frac{3}{4}$ and 1 h. p.,
110/220 volt, 60 cycle, 1750 r. p. m., repulsion induction.**

Also Three Phase Motors in $\frac{1}{2}$ h. p. to $1\frac{1}{2}$ h. p. sizes.

—Sold With a 5 Year Guarantee—

Send For Complete Details and Attractive Prices.

EMERALD ELECTRIC CO., Adrian, Mich.

SPEED

SPOT WELDERS

$\frac{1}{2}$ to 50 K. V. A.

Made foot-operated
and variable speed
**AUTOMATIC MOTOR
DRIVE**, no change
gears, for welding
from .0005 to $\frac{5}{8}$ "
combined thickness.

Welders for Fine
Work Priced As
Low As

\$55.00

Submit Your Problems



MANUAL



AUTOMATIC

EISLER ELECTRIC

763 So. 13th Street,

NEWARK, N. J.

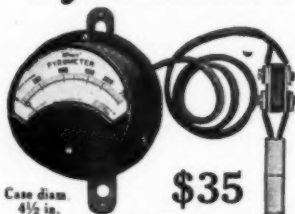
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"ALNOR" Pyrometers

for the
Hardening
Furnace

MODEL 223

Inexpensive, yet accurate and durable, the ALNOR Pyrometer is used by large and small shops everywhere for heat-treating work. Because of its low first cost and compact size it is also very popular for soft metal melting, galvanizing, die casting, japanning, enameling, measuring flue gas temperatures and many other purposes.



Case diam.
4½ in.

Scale length
3½ in.

\$35

With 10 ft. Alloy Wire, connector block and a No. 8 gauge insulated thermo couple 24" long without protection tube

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Illinois Testing Laboratories, Inc.
150 W. Austin Ave., Chicago, Ill.

BETTER-MADE
DIE SETS

BAUMBACH

AT LOWER
COST

24
DIFFERENT
STYLES



OVER
95,000
SIZES

STANDARDIZED

Semi-Steel

DIE SETS

Drop Forged Steel

Send For Our New 208 Page Catalog

E. A. BAUMBACH MFG. CO.
1810 South Kilbourn Ave., CHICAGO, ILLINOIS

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It has been the means of bringing many buyers and sellers together, to their mutual profit and satisfaction.

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FREE BUYERS' SERVICE

To All of Our Readers

If you will list below the new or used metal-working machines or machine shop equipment for which you are in the market, and mail it to us, we shall be glad to broadcast it to all of our advertisers. Replies will come from them, not from us.

But if you prefer that we put you in direct touch with the manufacturers of any particular machine tool or other metal-working equipment, let us know and we will endeavor to locate them for you.

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HIGH SPEED
ROTARY
FILES
HAND CUT



FLEXIBLE SHAFTS AND EQUIPMENT
N. A. STRAND & CO.

Send For Catalog

5001-5009 No. Lincoln St.,

Chicago, Ill.

ARMSTRONG

TRADE MARK REG. IN U.S. PAT. OFFICE

System of Tool Holders

The Armstrong System of Tool Holders has been awarded; the two highest Awards, Pan-Pacific Exposition, San Francisco; Highest Award, Universal Exposition, Liège, France; Highest Award, World's Fair, St. Louis; Highest Award, Universal Exposition, Paris; and the Franklin Institute Medal of Merit. Greater than these ARMSTRONG TOOL HOLDERS have been declared "Standard Equipment" in over 96% of the machine shops and tool rooms.



SEE THE
ARMSTRONG
TOWER OF TOOLS

1933

A CENTURY
OF PROGRESS
CHICAGO

Write for Catalog B-27

Armstrong Bros. Tool Co.

"The Tool Holder People"

308 N. Francisco Ave.,
CHICAGO, U. S. A.

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you are now
reading - - -
could be
*your display***

- - -

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somebody
else reading
it**

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**Hitchcock Publishing Co.
508 S. Dearborn St., Chicago
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WISE

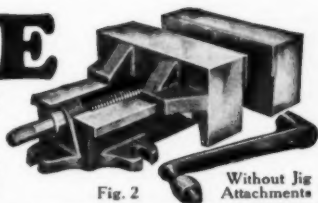
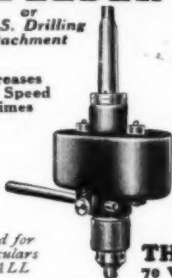
**A good one for Driller,
Miller, Shaper, or Planer.**

6", 9" and 12" Jaws

— DRILL — SPEEDER

**or
H. S. Drilling
Attachment**

**Increases
the Speed
3 Times**




Without Jig Attachments

KNURL HOLDER

for Turret Lathes

Adjustable to any size within capacity.



Shank 
to suit Turret

THE GRAHAM MFG. CO.
79 Willard Ave., PROVIDENCE, R. I.

When You Move

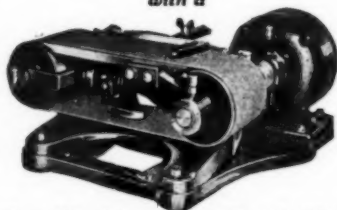
Please drop us a line, giving both your **old** and **new** address. Or if the name of your company has been changed, please tell us the **old** name and the **new** one. That will enable us to keep our mailing list up to date, and will insure your receipt of this publication monthly.

If you wish this book addressed to any particular individual in your plant, we shall be glad to comply with your request. There is no charge. Thank you.

Hitchcock Publishing Co.
508 So. Dearborn St., Chicago, Ill.

Abolish Expensive Hand Finishing

with a



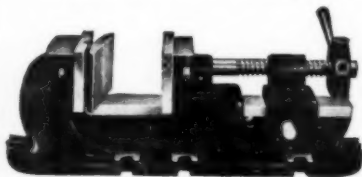
Simplex-M Abrasive Band Grinder

This Grinder accelerates production and cuts costs. Hand emerying or filing operations are antiquated in comparison. The use of this new modern machine assures straight grain finishes with sharp edges. *Details of this and other styles and sizes on request.*

WALLS SALES CORP., 96 Warren Street
NEW YORK

Gem Drill Press Vise

Discard Obsolete Equipment!



Made
In
3-sizes
Up To
10½"

Equip Your Plant with GEM VISES

J. E. Martin Tool & Die Works

528 W. State St.,

SPRINGFIELD, OHIO

WRITE FOR NEW PRICES

To Industrial Plants

For the mutual benefit of yourselves and our advertisers, we want to be sure that the Blue Book goes, without cost, to those in your plant who can use it to good advantage.

Quite a number of you, particularly among automobile manufacturers, have sent us lists of the prominent men in your organizations who are most closely identified with the planning of your improvements and the selection or purchase of your machinery.

If you have not done this, you are earnestly requested to send us such a list of names, so that we may mail the Blue Book regularly every month to those of your own selection, without cost or obligation of any kind whatsoever. Simply tear out this page, write the names on the reverse side, and mail it to the publisher.

Our only object is to make the Blue Book the best buying and selling medium on earth between manufacturers of machine tools and shop equipment and plants such as yours.

(See next page)

In Spite of Precautions Taps Break in the Hole

That's bad enough—but the real expense comes in stripping the threads when you remove the broken tap.

The Walton Tap Extractor

offers an effective, instantaneous way of overcoming this loss. Its steel fingers inserted in the broken tap remove it intact. An apprentice can operate it!

Made in three and four-flute styles

Often pays for itself in the 60 day trial allowed



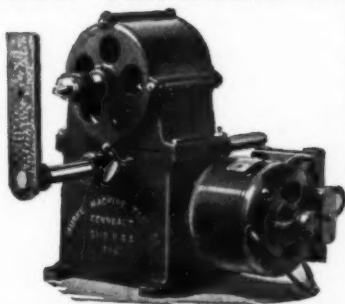
The Walton Company

302 Pearl St.,

Hartford, Conn.

BURKE

606 TAPPING MACHINE



Efficient

Portable

Cone Clutch Drive

Bronze Bearings

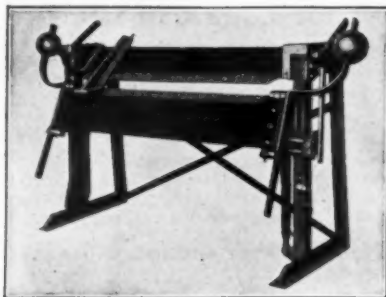
Self contained motor

Capacity $\frac{5}{8}$ " in cast
iron, $\frac{5}{16}$ " in steel

Ask for Circular

The Burke Machine Tool Co., 279 E. 16th St.,
Conneaut Ohio

Whitney - Jensen BRAKE



Capacity 16 gauge
or lighter.

Can be changed
into box or pan
brake in 10 or 15
minutes, making
it a dual machine.

Bends opposite
from any other
machine.

Stationary platen
makes very square
corners possible.

Send for Our Catalog and Complete Information

WHITNEY METAL TOOL COMPANY
95 FORBES ST., ROCKFORD, ILL.

This Publication

Over 27 years ago this publication began advertising the products of reliable manufacturers to the metal-working trade. It is mailed regularly each month to every worthwhile prospective buyer of machinery, equipment, supplies and services in the industry. In the 27 years it has been published, millions of dollars worth of merchandise has been purchased by its readers.

Those who receive this publication regularly read it and respond to its advertising messages. Thousands of plants use it as a buying guide. We believe we sell more products per dollar of advertising than you can obtain in any other way. It is precisely the one medium that can produce profitable results for its advertisers at a reasonable cost.

Rates, circulation and other data on request

Hitchcock Publishing Co.
508 So. Dearborn St., Chicago, Ill.

STANDARDIZATION PAYS

Universal Joints

Steel and Bronze



Send for Circular giving specifications
and prices on complete line

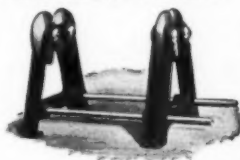
BOSTON GEAR WORKS, INC.

DEPT. HMT, NORTH QUINCY, MASS.
BOSTON SPRINGFIELD (Mass.) NEW YORK PHILADELPHIA CLEVELAND CHICAGO

BOSTON GEARS

Anderson Ever Ready

Exceedingly Sensitive



Balancing Ways

Easy to Manipulate

Made in six sizes to balance anything that revolves from a crank shaft to a 24,000 lb. turbine rotor. They require no special leveling, no adjustment, and no centers.

Equipped with glass-hard spindles, chilled steel discs, and especially sensitive ball bearings, to give accurate, long time service.

"Swing"	20"	40"	60"	72"	96"	72"
Greatest distance bet. standards..	20"	30"	30"	66"	88"	20'
Capacity in lbs.	1000	2000	2000	5000	10000	24000
Approx. shipping weight.....	45	90	150	350	650	
Code	Bend	Bid	Bis	Bib	Ben	

Anderson Bros. Mfg. Co.
1915 Kishwaukee St., Rockford, Ill.

A Little Speed, Please

Oh: If you keep holding your mouth that way, I'm going to kiss you.

Ah: Well, I can't hold it that way much longer.

A Voice of the Law

Village Cop: You can't go through here with your cut-out open.

Motorist: But I have no cut-out on this car.

Cop: Then get one put on and keep it closed.

If Genuine

Skeptical Miss: Can this coat be worn out in the rain without hurting it?

Fur Salesman: Lady, did you ever see a skunk carry an umbrella?

Pie a la Cook Book

Husband: Goodness sake, I smell something burning!

Young Wife: Yes, it's the pie, but according to the cook book, I can't take it out for another twelve minutes.

A Typographical Error

See here, said the angry visitor to the reporter, what do you mean by inserting the derisive expression "Apple sauce" in parenthesis in my speech?

Apple sauce? Great Scot, man, I wrote Applause.

No Necking in the Cab

Jim: Say, Joe, can you tell me why there are fewer railroad accidents than automobile accidents?

Joe: Well, perhaps not exactly, but I think it is because the engineer isn't always hugging the fireman.

Horse and Horse

Ephraim: What yo' all doin wif dat papah, Mose?

Mose: I'se writin mah gal a lettah.

Go 'way, niggah, yo' kain't write.

At's all right, Smoke. Mah gal kain't read.

Transformation

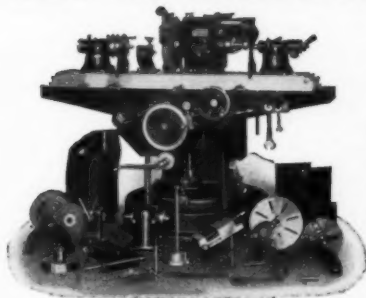
Waiter, what is this on the bill?

Bungalow fluff, sir, at 40 cents a portion.

But what is it?

Formerly cottage pudding, sir, at 15 cents.

SIX Grinders In ONE

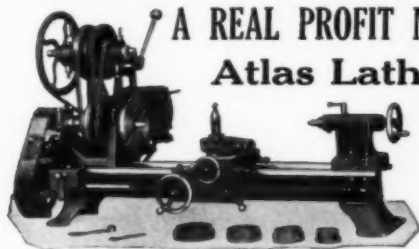


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Universal
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Screw
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Economical operation and profit are dependent upon continuous machine tool performance.

The service that Sunoco Emulsifying Cutting Oil renders many leaders in the metal cutting industry in reducing the cost of production, is at your disposal for operations in your plant.

Increased machine speed, longer runs per tool grind, less lost time for resetting, reduced tool maintenance, greater accuracy and better finish are the reasons for the increasing use of Sunoco.

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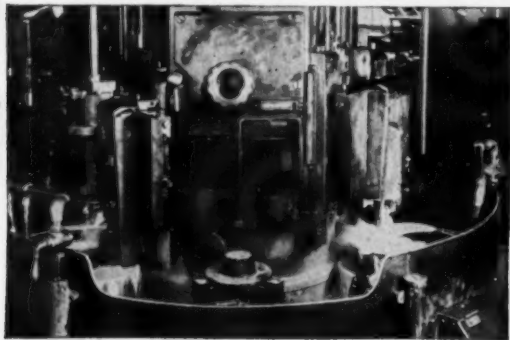
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MATERIAL: STEEL FORGING.

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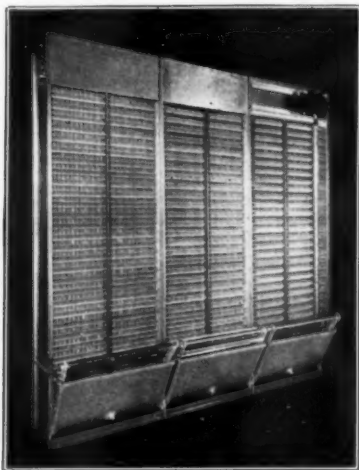
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the assistance of
our experienced
Cutting Oil Engineers.*

Pittsburgh Church First To Use Aluminum Air Filter Machine



The East Liberty Presbyterian Church of Pittsburgh, Pa., has been built to endure, and to withstand time and corrosive elements. Aluminum has been used in its construction everywhere possible, since this metal is rustless and will last longer than the material ordinarily used for construction purposes. Even the air filtering equipment is made of Alcoa Aluminum to insure the lasting qualities of the system.

Air filters play a prominent part in the ventilation of such a fine structure as this Church. Located at the intake of the various ducts supplying air for the heating and ventilating of the building, the filters exclude atmospheric dust that otherwise would become harmful to the interior decorations, as well as to the health and comfort of the attendants.

Modern engineering practice has adopted air filtration as a necessary element in the ventilation of churches, schools, hospitals, hotels, stores and office buildings. Air filters are also coming into more general use in industrial plants and specifically for preventing dust being blown into electrical machinery which has to be cooled while operating. In many other cases they prove an excellent investment in connection with process work requiring the exclusion of injurious dust.

The filter illustrated here was manufactured by the Independent Air Filter Company, Chicago. It is one of several similar units supplied for the East Liberty Church, all being made of "Alcoa" aluminum, in keeping with the "endurance" idea so well carried out in the entire structure.



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The controlled circulation of *Hitchcock's Machine Tool Blue Book* will deliver your message to more responsible users and buyers of machine tools and allied equipment, including aircraft, automotive and other large manufacturing plants, railway mechanical officials, etc., in the United States, than any other publication on earth. It is also sent to the more important importers in all parts of the world.

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Drilling Machines, Sensitive

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Foots-Burt Co., Cleveland, O.

Drilling Machines, Vertical

Foots-Burt Co., Cleveland, O.

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- Electric Blowers**
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- Grinding Machines, Internal**
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- Milling Attachments**
Burke Machine Tool Co., Conneaut, Ohio

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- Milling Machines, Hand**
Burke Machine Tool Co., Conneaut, Ohio
- Milling Machines, Plain**
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- Speed Reducers**
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- Stencils, Brass and Oil Board**
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Straightening Machines

Whitney Metal Tool Co., Rockford, Ill.

Stud Setters

Proconier Safety Chuck Co., 14 S. Clinton St., Chicago

Tap Extractors

Walton Co., Hartford, Conn.

Tap Holders

Proconier Safety Chuck Co., 14 S. Clinton St., Chicago

Tapping Attachments

Proconier Safety Chuck Co., 14 S. Clinton St., Chicago, Ill.

Tapping Machines and Attachments

Burke Machine Tool Co., Canaan, Ohio
Proconier Safety Chuck Co., 14 So. Clinton St., Chicago, Ill.
Whitney Metal Tool Co., Rockford, Ill.

Thermometers, Resistance Type

Illinois Testing Laboratories, Inc., 150 West Austin Ave., Chicago, Ill.

Threading Machines, Automatic, Stud

Grant Mfg. & Mch. Co., Bridgeport, Conn.

Threading Tools

Armstrong Bros. Tool Co., 308 N. Francisco Av., Chicago

Tool Holders

Armstrong Bros. Tool Co., 308 N. Francisco Av., Chicago
Western Tool & Mfg. Co., Springfield, O.

Tools, Boring

Armstrong Bros. Tool Co., 308 N. Francisco Av., Chicago

Tools, Lathe and Planer

Armstrong Bros. Tool Co., 308 N. Francisco Av., Chicago

Tools, Machinists'

Armstrong Bros. Tool Co., 308 N. Francisco Av., Chicago

Tube Flanging Machines

Grant Mfg. & Mch. Co., Bridgeport, Conn.

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American Tool Works, Inc., Hartford, Conn.
Boston Gear Works Inc., Norfolk Downs, Mass.

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Danahue Steel Products Co., 74th and Ashland Ave., Chicago
Eastern Machinery Co., Cincinnati, O.
Elyria Belting & Mch. Co., Elyria, Ohio.
Essley Machinery Co., E. L., 835 Rees St., Chicago, Ill.

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Hill, Clark & Co., 645 W. Washington Blvd., Chicago, Ill.
Indianapolis Machinery & Supply Co., Indianapolis, Ind.
Interstate Mch. Co., 130 S. Clinton, Chgo.
Irroquois Machinery Co., Buffalo, N. Y.
Johnson & Sons Machinery Co., Wm. C., St. Louis, Mo.
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Land, L. J., 207 Centre St., New York, N. Y.
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Maplewood Machinery Co., 2834 Fullerton Ave., Chicago, Ill.
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Miles Machinery Co., Saginaw, W. S., Mich.
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Reliance Machinery Sales Co., Pittsburgh, Pa.
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Scott-Bansbach Mch. Co., 4607 W. 20th St., Chicago
Segal Machinery Co., 809 W. Lake St., Chicago, Ill.
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Steege Electric & Machinery Co., 18 So. Clinton St., Chicago, Ill.
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Sun Machinery Co., 38 Van Buren Street, Newark, N. J., Ohio
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Vises, Milling Machine

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for Safety with Efficiency—use*
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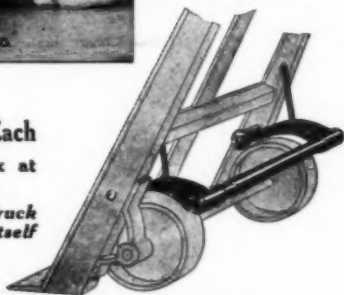


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Chicago, Ill.

Used and Rebuilt Machinery Section

Lists of Used and Rebuilt Machinery, either For Sale, Wanted, or For Exchange, set in uniform style, will be published in the Classified Section at the rate of 60 cents a line across the page, each issue, plus \$3.00 for name and address. Minimum charge, \$6.00. No display permitted.

Write directly to those offering the machines for sale, for prices and full descriptions. If what you seek is not advertised, use the blank enclosed to make known your wants in either new or used machinery and the publisher will pass them along to the advertisers.

FOR SALE BY

James J. Gouse, Inc. - - - **137 Oliver Street, Boston, Mass.**
 Press, No. 57 Toledo 3" str., bolster 24"x24", die ht. 13½", cap. 150 ton, \$1175.
 Press, No. 59 Toledo 2½" str., bolster 33"x41", die ht. 25", cap. 250 ton, 1300.
 Press, No. 812, Z-H, 3½" str., bolster 25"x30", die ht. 13½", cap. 150 ton, 1200.
 Press, No. 5 Farrel Fdry., dbl. cr. 1½" str., bolster 51"x26", die ht. 12½" 800.

FOR SALE BY

L. J. Land - - - **144 Grand St., New York, N. Y.**
PRESS BRAKE
 Dreis & Krump steel press brake. 10' 6", 5/16" capacity, direct motor drive with 20 h. p. a. c. 3 phase, 60 cycle, motor, complete with automatic oiling and greasing system. Machine used less than one year.

FOR SALE BY

W. L. Steege Electric & Machinery Co., 18 S. Clinton St., Chicago, Ill.

Bench lathe, 9x36, m. d. new. \$	79.	Motors, new, repulsion type,	
Drill, Allen 3 sp., b. b., ½"	265.	½ h. p.	\$16.50
Drill, Bickford radial, 3½"	385.	Plater, 2500 amp., motor dr	350.
Lathe, 14x6 Hendey, complete	165.	Punch press, No. 3 Consolid.	115.
Motors, 5 h. p., a. c.	35.	Spot welder, 10 k. w.	135.

FOR SALE BY

Mid-West Machine Tool & Supply Co.,	Davenport, Iowa
Automatics, Nos. 0 & 00 B. & S.	Hobbers, Nos. 3, 12-B & C.
Drill, Allen 6 spindle, h. s.	Lathe, No. 9 LeBlond multi-cut.
Grinder, 10"x36" Norton.	Millers, Nos. 1 & 2 Brown & Sharpe.
Grinder, No. 10 B. & S. ext.	Radials, 3' Cincinnati Bickford.
Grinder, No. 22 Heald rotary surf.	Turret lathe, No. 6 Warner & S.

Partial list; send us your inquiries.

FOR SALE BY

Geo. M. Bernstein & Co., - 225 No. Elizabeth St., Chicago, Ill.

Bolt cutter, 1½" Reliance.	\$ 95.	Miller, No. 3 Kemp. plain.	\$285.
Bolt cutter, 2½" Nat. 37 sts. ds.	245.	Pipe machine, 4" Stoeber.	90.
Drill, No. 2 Colburn Mfg. h. d.	175.	Planer, 30"x24"x6' Rockford.	145.
Drill, No. 4 Colburn Mfg. h. d.	250.	Riveter, 4-A high speed.	135.
Drill press, 20" Superior.	27.	Screw mch., No. 2G--B. & S. auto.	375.
Gear hobber, No. 3 B-C.	250.	Screw press, 20 ton Stecher.	115.
Lathe, 16"x8" South Bend gap.	165.	Shaper, 12" Smith & Mills.	95.
Miller, No. 1 Kemp. univ. v h.	395.	Tapper, No. 2X Garvin.	80.
New 4 Jaw Independent Lathe Chucks, 3" \$3.50, 4" \$4.50, 5" \$6.50, 6" \$8.00.			

USED AND REBUILT MACHINERY

FOR SALE BY

Brown Machinery Co.,

2333 N. 9th St., St. Louis, Mo.

Brake, press, L. & N. 10' 14 ga.
Drills: 24", 26" and 32" No. 66-D
Moline 4-spindle Hole Hog.
Grinders: No. 6 Besly dbl. spindle;
No. 220 Badger auto. disc; 12x30"
Modern, plain, s. c. c. s.; No. 12
Brown & Sharpe, universal tool;
No. 4 Cincinnati, 12x72 cylindrical.
Hammer, 40 lb. Bradley, helve.
Lathes, 30" Blaisdell; 28-40" Lodge
& Shipley; 26" Putnam, t. a.; 16"
L. & S.; 16" Monarch; 12" & 14"
Seneca Falls, q. c. g.

Millers: No. 2 Hendey-Norton, univ.;
No. 3 Fox; No. 4 Hendey Lincoln;
No. 3 Kempsmith, universal; No. 3
B. & S., vertical, s. p. d.
Press, No. 7 Zeh & Hahneman,
Nos. 1, 3, 4 Loshbough Jordan.
Punch, Cleveland C in 4"; Rock
River Style L in 4".
Shaper, 24" Ohio.
Shear, 50" 10 ga Excelsior gap.
Shear, square, 10' L. & N. 14 ga.
Threaders: 4" Geometric; National
1 1/2" double head.

FOR SALE BY

Scott-Bansbach Machinery Co.,

4607 West 20th St., Chicago, Ill.

Miller, Ingersoll slab, 42"x36"x9'	\$ 400.
Planer, 24x24x8 Fitchburg, 1 head	100.
Planer, 36"x36"x12' Cincinnati with 2 heads	800.
Press, No. 30A Perkins o. b. i., 2" stroke, 1500 lbs.	100.
Press, No. 3 American (R & K) o. b. i., 2 1/2" stroke 2000 lbs.	125.
Press, No. 3, L. & J. o. b. i., 2 1/2" stroke, 2000 lbs.	185.
Press, No. 4 Niagara o. b. i., 2" stroke, 1700 lbs.	175.
Press, No. 5 Niagara o. b. i., 2 1/2" stroke, 2900 lbs.	200.
Press, 47 ton o. b., 2 1/2" stroke, about 4800 lbs.	150.
Press brake, 10' Ohl, No. 10 gauge, motor drive, with motor, late type.	650.
Saw, No. 5 Marvel high speed 6"x6"	75.
Screw machine, No. 1, B. & O. plain head, 13/16" capacity	125.
Screw machine, No. 2 Foster, friction back geared, 1" capacity.	175.
Separator, Curtis oil, 1 bushel.	200.
Separator, oil, American 1 1/2 bushel.	200.
Shaper, 20" Cincinnati, crank, back geared, vise and c/s.	350.
Turret lathe, 24x10" Milholland, for chuck and bar work.	400.
Turret lathe, 34"x36" Acme with chucking equipment.	300.
Turret lathe, 24" Steinle, 4" hole, side carriage.	200.

FOR SALE BY

Wm. C. Johnson & Sons Machinery Co.,

St. Louis, Mo.

1211-1223 Hadley Street,

Bar shear, 5"x4".
Boring mill, 36" Gisholt.
Drill, 22" Barnes, back geared.
Drill, 24" Prentice, sliding head.
Drill, 25" Barnes back geared.
Drill, 28" Barnes sliding head.
Drill, 1-spindle Avey.
Drill, 3-spindle Avey.
Grinder, Wells Bros. universal.
Grinder, 12"x60" Landis universal.
Hammer, 60 lb. Bradley helve.
Hammer, 600 lb. steam.
Lathe, 16"x9" Lehman.
Lathe, 24"x12" Lodge & Shipley.
Lathe, 24"x12" Schumacher & Boye.
Lathe, 48x12" Lodge & Shipley.
Lathe, 30"x15" Lodge & S., q. c. g.
Lathe, 36"x15" American, q. c. g.
Miller, No. 1 U. S. hand.

Miller, No. 5-B Brown & Sharpe.
Miller, No. 2 Kempsmith.
Miller, No. 3 Brown & Sharpe.
Pipe machine, 4" Oster.
Pipe machine, 8" Williams.
Planer, 24"x24"x6' iron.
Press, No. 57 Swaine straight back.
Press, No. 1 1/2 Bliss toggle.
Press, No. 37 Niagara str. back.
Press, No. 24 Toledo cam drawing.
Press, No. 723 Toledo cam drawing.
Punch, No. 14 W. W., 12" throat.
Punch, double end, two 20" throats,
capacity 1" in 1".
Sand slinger, Beardsley & Piper.
Shaper, 16" Ohio.
Shaper, 24" American, b. g. crank.
Tapper, auto., Rickert & Schafer.

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Drill, 20" Sibley, t. a. 16" tbl., m. d.
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Grinder, elec. 14" Bridgeport m. d.
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Lathe, 21"x10" LeBlond, g. h., t. a.
Lathe, 24"x16" Bridgeford, g. h. m. d.
Lathe, 20"x12" LeBlond, c. g. c., t. a., b. d.
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Lathe, tur., 26" Gisholt, 9" hole, m. d.
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Miller, universal, No. 3 LeBlond.
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Rolls, bending, 12 x 1 1/2" H. & J. d. e.
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Saw, hack, No. 4 Robertson, 8" x 8".
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Shears, gap, Niagara No. 562; 62"
16 ga.; No. 672, 72" 10 ga.
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Punch press, No. 87 Nia., s. s., t. r.
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 Shear, rotary, 16 ga., Yoder, 24" thr.
 Shear, 10' x 16 ga. Ohl power.
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 Turret lathe, 28" Gisholt, 34" h. s.
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 Wheel press, 60-ton W. S., 34"x84"
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Press, Toledo No. 1684, 18" stroke.
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Shear, power, 10' 18" ga.
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Lathe, 16"x8' Hendey, q. c. g., t. a. 250.
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Grinder, No. 3 Bryant internal.
Lathe, 18"-20"x20' L. & S.

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Miller, No. 2 LeB. hvy. univ., m. d.
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Bending brake, 6' Chicago Steel, size 68, 10 gauge, 8" fingers, driven by a 3 h. p. motor, Leaf Type.
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Drills, upright, 21" & 24" Cincinnati.
Grinder, 6"x18" Landis.
Grinder, 12"x36" Cincinnati.
Grinder, 14"x72" Norton.

Lathe, 16"x8' Lodge & Shipley.
Lathe, 50"x16" Pittsburgh.
Mill, boring, 100" Betts.
Mill, horizontal, 24" bar Cleveland.
Miller, Nos. 2, 3 & 4 Cincinnati.
Press, Nos. 3 & 5 Toledo o. b. i.
Shaper, 16" & 20" Ohio.
Shear, 10' x 14 ga. Kutscheid.

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Boring mill, 54" Colburn vert., 2 hds.
Column facer, 14" Espen-Lucas.
Crane, electric travel, 15 ton a.c. mtrs.
Drills, all sizes upr., sensi. & radial.
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Lathe, 20"x10" Flather, belt, new.
Lathe, 18"-28"x8" South Bend, gap.
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Punch, No. 3 Southwark 4x8", mtr.
Turret, No. 4 Warner & S. univ.

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Air compressors, 8x8, 6x6 I. R. compl.
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Gear hobber, No. 3 B.-C. arbor, grs.
Grinder, No. 6 18" Bealy Ring.
Grinder, No. 1 LeBlond tool & cutter
Lathe, 16"x6" L. & S., g. h., m. d.
Lathe, 19"x8" Sidney, q. ch., d. b. g.
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Punch press, No. 4 Marshall'n. o. b. i.
Punch press, No. 4 Rock b. g., 3" st.
Punch & shear, No. 53 Beloit.
Radial drill, 30" Fostick, s. p. d.
Shaper, 7" Rhodes, comp. with vise.
Shear, 10' D. & K., 14 ga. capacity.
Spot welder, 12 K. V. A. A. E. F.
Turret, No. 4 Warner & S. univ.

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Automatic, $\frac{1}{2}$ " cone 4 spindle m. d.
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Auto., No. 53 National-Acme, 4 sp.
Crane, elect. 101. P. & H. 56" sp. 220 v.
Lathe, 16"x8" Hendey, tie bar, t. a.
Lathe, 50"x16" New Haven.
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Press, No. 5 Toledo o. b. i., flywheel.

Pittsburgh, Pa.

Press, No. 6 Toledo o. b. i., geared.
Planer, 36"x36"x8" Gray, 2 heads.
Planer, 50" rotary, turntable, m. d.
Punch, Whittemore comb. $\frac{1}{2}$ " thru $\frac{1}{4}$ "
Saw, metal band 4"x4" Napier, m. d.
Saw, metal band 10"x10" Napier, belt
Seamer, No. 2 Bliss, double.
Shear, plate, 6"x1" H. & J. turntable.
Shear, 6"x6"x1" H. & J. dbl. angle.
Vertical turret lathe, 36" Bullard
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No. 3; Ohio No. 29 B. & S. No. 2-A
single pulley drive, all universal;
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Punch presses, Bliss No. 20; Bliss
No. 21; Swaine Nos. 33 & 35 o. b. i.
Screw machines, Foster No. 7.
Shapers, G. & E. S. & M., Cin., Ohio,
Steptoe, Queen City, 12", 16", 18",
20", 24" and 26".
Square shears, Niag. 62" 18 ga., pwr.
Turret lathes, W. & S. No. 2A univ.

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THREAD ROLLERS: Waterbury and Manville, $\frac{1}{4}$ " to 1".

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4" bar Lucas Horizontal, m. d.

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- 21, 24, 28" Cincinnati Bickford Upr.
21, 24, 32, 36" Aurora Upright.
22, 26, 34" Barnes Upright.
3, 3½, 4, 5, 6" American Triple Pur.
Radials, g. b. dr.
2½, 3, 4, 5, 6" American Triple Grd.
Radials, g. b. dr.
4, 5, 6" Cin. Bickford Rad., g. b. dr.
No. 1, 2, 3 Avey H. S. B. B. Spl. Sp.
No. 1, 2, 3 Avey H. S. B. B. Multiple
Spindle, 2 to 6 spindles.
No. 2 Detroit 5 spin le Horizontal.
No. 14 Natco Multiple Spindle.
No. 216, 220 Baker 2 spindle.
No. 26C Fox Multiple spindle.
4 spindle No. 2 Colburn Mfg.
No. 00S, 1SS Garvin Horiz. Duplex.

GEAR CUTTERS AND HOBBS

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No. 2, 3, 12 Barber-Colman.
No. 12, 18H Gould & Eberhardt.
No. 5A Lees-Bradner, m. d.
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No. 7, 7S Fellows.
6, 11, 18" Gleason Bevel Gear Gen.
12, 30" Ingle Gear Tooth Rdu. Mch.
16" Cincinnati Auto. Gear Hobber.
Gleason Beve Gear Tester.

ENGINE LATHES

- 14"x6" American, cone head.
16"x6" Hendey, geared head.
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16"x8" American, geared head.
16"x8" Lodge & Shipley, select. head.
18"x8" American, geared head.
18"x8" Greaves-Klu-man, cone head.
18"x8" Lodge & Shipley, sele t. head.
18"x12" L. & S. Sel. Hrad, m. d.
20"x8" Hendey, geared head.
20"x20" American, geared head.
24"x16" Lodge & Shipley, cone head.
27"x16" American, geared head.
36"x18" Lodge & Shipley, cone head.
36"x20" Bridgeford, geared head.
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MILLING MACHINES

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No. 2, 3 Cincinnati Univ cone.
No. 3 Cincinnati Universal, s. p.
No. 2, 3, 4 Cincinnati Vertical, s. p.
No. 3, 4, 5 Cin. Pl., rect. overarm.
No. 2, 3, 4 Cin Pl., round overarm, m d.
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Duplex Automatics.
No. 33 Kempnath Mfg. Type.
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- 20", 24" American B. G. Crk. s. p.
16, 20, 24" Gould & Eberhardt, cone.
20, 24" Cincinnati, cone.
16, 20, 25" Smith & Mills, come.
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20" Steptoe, cone.
25" Springfield, s. p. drive.
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36"x36"x10" Cin. Planer, 2 heads.
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sing motor drive.

MISCELLANEOUS

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motor in base.
Air Compressor, 14x14" Bury, belt. d.
Bolt Cutters, 1, 1½ Landis Single hd.
Broaches, No. 2, 3 N. J. LaPointe dbl.
Grinders, No. 60, 65, 70, 72A3, 75
Head Internal.
Grinders, 16x48, 16x68" Landis Ckft.
Grinders, 6x32" Norton Plain Cyl.
Grinder, 12x36" Landis Plain Cyl.
Disc Grinder, No. 51 Bealy, Mtr. Dr.
Grinder, No. 2 B. & S. Auto. Sur.
Grinder, No. 2, 3 W. & M. Auto. Sur.
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- 1-5¹ Mueller Plain Radial, single pulley drive.
- 6-No. 217 Baker Single Spindle, motor drive.
- 1-No. 217 Baker 2-Spindle, motor drive.
- 2-Foote-Burt Gear Box, single pulley drive.
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Vertical Surface Grinder—25 H. P. 220
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—30" Magnetic Chuck—Generator.

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Rivett Precision Lathes, like new.
 54"x24" H. S. & G. Grd. Hd. M. D.
 42"x24" American Grd. Hd. late type.
 24"x22" Bradford, Q. C., 3 S. C. D.
 46"x16" H. S. & G. Grd. Hd., late type
 24"x12" L. & S. Patent Grd. H. S. P. D.
 30"x10" Lodge & Shipley, 3 S. C. D.
 D. B. G. Q. C.
 20"x8" Am. Grd. Hd., M. D., late t.
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Nos. 50, 55, 60, 65 and 70 Healds.
 6"x18" Landis Plain, Self Contained.
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 Grinder, complete equipment.

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 6" Oster Pipe Machine, motor drive.

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24"; 36" and 42" Bullard "New Era"
 A. C. motor drive.
 60" Niles Boring Mill, 2 heads.
 84" Niles Vertical, motor drive.
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Milling Machines

No. 2 Van Norman Duplex Miller.
 No. 4 Cincinnati H. P. Pl., S. P. D.
 No. 4-A Brown & Sharpe Universal.
 No. 3-A Brown & Sharpe Universal.
 No. 3 Cincinnati, Plain.
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 No. 3 Cincinnati Vert. H. P., S. P. D.

Nos. 2 and 3 Cincinnati High Power
 Plain, S. P. D. flange nose
 No. 2 Cincinnati Universal H. P.
 flange nose; S. P. D.
 5" Pratt & Whitney Automatic.
 18" Cincinnati Plain Mfg. Miller.
 18" Cincinnati Automatic, M. D.
 24" Cincinnati Automatic, M. D.
 No. 33 Kempnath Automatic.
 No. 3 Rockford Rigidmil; 98% new.
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 Feeds; brand new.
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Planers

24"x24"x8" Gray Planer.
 27"x27"x8" Woodward & Powell.
 36"x36"x10" Gray, 2 heads.
 26"x26"x12" Whitcomb-B., 2 heads.
 36"x48"x12" Liberty Openside; two
 rail heads. One side head.

Radial and Upright Drills

4" and 5" American Triple Purpose.
 3 1/2" American Triple Purpose, M. D.
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 3-sp. Avey High Speed Ball Bearing.
 6-spindle Rockford 20" B. G. P. F.
 No. 40 Natco Straight Line Multi.

Shapers

16", 20", 24" G. & E., mtr. dr. thru g. b.
 16", 20" and 24" G. & E., cone drive.
 20" Steptoe, S. P. D.
 24" Potter-Johnson M. D. thru gear box
 24" Cinti. h. d. mtr. dr. thru gear box.

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 No. 3-B LaPointe Broaching Mche.
 25 ton Henry & Wright Dieing Mche.
 50 ton Henry & Wright Dieing Mche.
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 6 spindle 3/8" Acme Nut Tapper.
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All above arranged for constant speed m. dr. Each machine has P. R. T.

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No. 2 Cincinnati Universal. No. 3 Cincinnati Plain.
Nos. 4, 3, 2 Cincinnati Vertical. No. 2 Cincinnati Plain.
All millers arr. for constant speed motor drive Geared Head. P. R. T.

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60"x35' Bed Niles Bement Pond. 24"x14' Lodge & Shipley.
48"x28' Bed Niles Bement Pond. 20"x10' American.
36"x14' American. 16"x8' Lodge & Shipley.
27"x16' American.

All Geared Head. Arranged for constant speed motor drive.

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6' American Triple Geared. 3' Cincinnati Bickford.
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No. 32 Lucas, 3 $\frac{3}{4}$ " Bar. 4 $\frac{1}{2}$ " Bar Universal.
Precision Types, Single Pulley Drive.

Have in stock. Power Presses, Shapers, Planers, etc.

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96" Gould & Eberhardt Gear Hobber for Spur & Bevel Gears.

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10	24-32	1.00
12	24	1.00
14	24-20	1.00

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3/8"	.40	1-1/2"	1.65
1/2"	.50	2"	2.50
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Size	U.S.S.	S.A.E.	Price, Each
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5/16	18	24	.13
3/8	16	24	.13
7/16	14	20	.13
1/2	13	20	.15
9/16	12	18	.20
5/8	11	18	.30
11/16	11	16	.30
3/4	10	16	.35
13/16	10		.35
7/8	9	14	.40
1	9		.40
1-1/8	8	14	.40
1-1/4	7	12	.50
1-3/8	7	12	.50
15/16	6	12	.75
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Inch	Per Gross	Inch	Per Gross
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9	2.25	12	3.75

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Shear, 8' Niagara Foot.

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Radial Drills, 2' and 3'.

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10"x42" South Bend Lathe.

21"x8' LeBlond q. c. s. lathe.

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200 & 500 ton Hydraulic Presses.

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50" Bertsch pw. Sh. 16" gap, 3/16" cap.

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300 ton Caldwell hydraulic wheel press.

24" G. & E. & 32" Cin. m. d. Shapers.

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42"x10' D. & H. Openside Planer.

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Latest Type, Equal to New Machine Tools

96" Cincinnati Boring Mill.

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4' American Radial Drill.

6' American Radial Drill.

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No. 2 B. & S. Double Arm, Plain. Miller, motor in base.

No. 20 Van Norman complete, motor drive.

Nearly 1,000 Other Tools in Stock.

MOREY AND COMPANY, Inc.

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NEW 5 HP 3 phase motors \$61.75

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12"x 5' Cleveland, geared head.

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18"x 8' American qk. ch., taper att.

21"x14' LeBlond.

TURRET LATHES and SCREW MACHINES

Nos. 52, 53 and 55 National Acme.

21" and 24" Gisholt, (motor drive).

8" capacity Acme.

13/16" capacity Foster (2).

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16" Smith & Mills, motor drive.

16" Ohio back geared, crank.

20" Smith & Mills, back grd. crank.

25" Smith & Mills, back grd. crank.

PRESSES

No. 2 Bliss Consol. O. B. I., new.

No. 21 Bliss Consol. O. B. I., new.

No. 39 Bliss Horning.

Emco bench.

DRILLS and RADIALS

4-spindle Demco bench (new).

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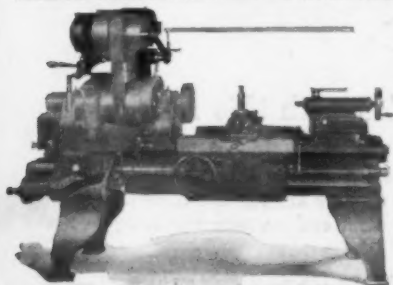
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